Question Paper Preview

Notations :

1.Options shown in green color and with ✔ icon are correct.

2.Options shown in red color and with ✖ icon are incorrect.

Question Paper Name:	Mathematics 31st May 2018 Shift1
Subject Name:	Mathematics
Creation Date:	2018-05-31 16:04:31
Duration:	120
Total Marks:	150
Display Marks:	No
Calculator:	None
Magnifying Glass Required?:	No
Ruler Required?:	No
Eraser Required?:	No
Scratch Pad Required?:	No
Rough Sketch/Notepad Required?:	No
Protractor Required?:	No

Display Number Panel:	Yes
Group All Questions:	No

Question Id : 5626804847 Question Type : COMPREHENSION Sub Question Shuffling Allowed : Yes Group Comprehension Questions : No

Question Numbers : (1 to 5)

Question Label : Comprehension

Read the passage carefully and mark the correct answers:

There are few of the Greek stories that we love so much as that of Alcestis who is a model of selflessness. Everyone remembers how Admetus, her husband, was under a curse, and unless one could be found to die for him, he must, on a certain day, give up his life and take himself into the dark realms of Pluto. And no one can forget that there was one to whom death seemed a little thing to suffer, if only thereby Admetus might be saved. This was his wife, Alcestis. So she, the brave woman, left the light of the sun behind her and journeyed alone to the under-world and the kingdoms of the dead.

Then there was sorrow and mourning in the halls of Admetus, until evening, when a guest came there. His strength was beyond that of mortals and his heart was open to the sadness of all. Taking pity on the sorrow of Admetus, he went and got the soul of Alcestis. Thus the curse was removed and Death himself vanquished by men. Alcestis and her husband lived till they were as ripe as corn and were then gathered to their fathers.

Sub questions

Question Number : 1 Question Id : 5626804848 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Everyone loves the story of Alcestis because it is

(1) a Greek story

(2) a tragic story

(3) a story of bravery and sacrifice

(4) a story of life and death

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 2 Question Id : 5626804849 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Admetus could be saved if

(1) Alcestis spoke to Pluto

(2) anyone was willing to die in his place

(3) he had not been cursed

(4) he was not the husband of Alcestis

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 3 Question Id : 5626804850 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Why did Alcestis leave "the light of the sun behind"?

(1) She was going to die to save her husband

(2) She did not like to walk in the sun

(3) She lived in the under-world

(4) She preferred darkness

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 4 Question Id : 5626804851 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Why was there sorrow and mourning in the halls of Admetus?

(1) They were feeling sad for the departed Alcestis

(2) A guest had come unannounced

(3) Admetus was cursed to die

(4) There was only darkness around as the sun was invisible

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 5 Question Id : 5626804852 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

What does the word "vanquished" mean?

(1) Vanished (2) Vaporized

(3) Deported (4) Defeated

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 6 Question Id : 5626804853 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the grammatically correct sentence:

(1) She goes to the market seldomly on Sundays.

(2) She seldom goes to the market on Sundays.

(3) She seldomly on Sundays to the market goes.

(4) Seldom she on Sundays does goes to the market.

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 7 Question Id : 5626804854 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the grammatically correct sentence:

(1) Tell me how I can learn good English from this book.

(2) How can I good English learn from this book tell me.

(3) Tell from this book how I can good English me learn.

(4) I can learn good English how tell me from this book.

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 8 Question Id : 5626804855 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Complete the sentence using suitable articles:

Shakespeare is _____ well-known dramatist of _____ 16^{th} century whose plays have been popular down _____ ages.

(1) the, the, the

(2) a, the, the

(3) the, the, a

(4) a, the, a

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 9 Question Id : 5626804856 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Complete the sentence using suitable articles:

_____road on _____ right side of _____ building leads to _____ pond.

(1) A, the, the, a

(2) The, a, the, a

(3) The, the, the, a

(4) The, the, the, the

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 10 Question Id : 5626804857 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Complete the sentence using suitable prepositions:

He stood _____ the window and looked _____ the scene outside.

(1) at, near

(2) near, at

(3) on, at

(4) up, down

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 11 Question Id : 5626804858 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Complete the sentence using suitable prepositions:

The children have been playing _____ the park _____ morning.

(1) at, for

(2) in, on

(3) to, since

(4) in, since

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 12 Question Id : 5626804859 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Complete the sentence using the suggested tense forms of the verbs in brackets:

We _____(hear—Present Perfect) that they _____(have—Simple Past) a difficult time finding our house.

(1) have heard, had

(2) have been hearing, had had

(3) have heard, have had

(4) have heard, have been having

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 13 Question Id : 5626804860 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Complete the sentence using the suggested tense forms of the verbs in brackets:

He _____ (prefer—Simple Present) bread but his friends _____ (order—Present Perfect) eggs for breakfast today.

(1) prefers, have ordered

(2) prefer, ordered

(3) preferring, ordering

(4) prefers, orders

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 14 Question Id : 5626804861 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Fill in the blank with the correctly spelled word:

English _____ must be learnt carefully.

(1) Pronounciation

(2) Pronouncietion

(3) Prononciaton

(4) Pronunciation

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 15 Question Id : 5626804862 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Fill in the blank with the correctly spelled word:

We can find comfortable _____ in this hotel.

(1) Acommodation

(2) Accomadation

(3) Accommodation

(4) Acommadation

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 16 Question Id : 5626804863 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Change to passive voice:

All must submit the assignment by next week.

(1) By next week all must submitted the assignment.

(2) The assignment must be submitted by the following week.

(3) The assignment must submitted by next week.

(4) All the assignment must submit by the following week.

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 17 Question Id : 5626804864 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Change to active voice:

The effort of the new team was appreciated.

(1) They appreciate new team effort.

(2) The new team appreciated the effort.

(3) Everyone appreciated the effort of the new team.

(4) Everyone the effort appreciated the new team.

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 18 Question Id : 5626804865 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the correct synonym for the underlined word:

He was given a medal as he was a brave warrior.

(1) valiant (2) valid

(3) coward (4) shy

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 19 Question Id : 5626804866 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the correct synonym for the underlined word:

The teacher tried to bolster the student's confidence.

(1) Hide (2) mentor

(3) deny (4) reinforce

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 20 Question Id : 5626804867 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the correct antonym for the underlined word:

The witch was ostracized by the society.

(1) removed

(2) welcomed

(3) punished

(4) helped

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 21 Question Id : 5626804868 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the correct antonym for the underlined word:

He viewed the result with trepidation.

(1) contentment

(2) fear

(3) indifference

(4) renunciation

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 22 Question Id : 5626804869 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following is the correct Compound sentence derived from the given sentence:

Having lived here for a long time, I can vouch for this place.

(1) I have lived here for a long time and can vouch for this place.

(2) As I have lived here for a long time I can vouch for this place.

(3) Having lived here for a long time, therefore I can vouch for this place.

(4) I can vouch for this place living here for a long time.

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 23 Question Id : 5626804870 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following is the correct Simple sentence derived from the given Complex sentence:

The train came on time though there was a thick fog in the morning.

(1) The train came on time because there was a thick fog in the morning

(2) In spite of a thick fog in the morning, the train came on time.

(3) As there was a thick fog in the morning, the train came on time.

(4) There was a thick fog in the morning but the train came on time.

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 24 Question Id : 5626804871 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the Reported form of the following sentence:

The doctor said, "Get her admitted to the hospital today."

(1) The doctor said her to admit to the hospital this day.

(2) The doctor said to get her admitted to the hospital today.

(3) The doctor said that they should get her admitted to the hospital that day.

(4) The doctor advised hospital admit for her today.

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 25 Question Id : 5626804872 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Choose the Direct Speech form of the following sentence:

She asked me when I was planning to come back.

(1) She said, "When I was planning to come back?"

(2) She asked, "When you was planning to come back?"

(3) She told, "When I am planning to come back?"

(4) She asked, "When are you planning to come back?"

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Display Number Panel: Yes
Group All Questions: No

Question Number : 26 Question Id : 5626804873 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which amendment to the constitution has made education a fundamental right for all children between 6 and 14 years ?

6 సం॥ నుండి 14 సం॥ వయస్సున్న బాలలందరికీ విద్యను ప్రాథమిక హక్కుగా, ఏ సవరణ ద్వార భారత రాజ్యాంగం లో పొందు పరిచారు ?

(1) 93rd (2) 83rd (3) 86th (4) 96th

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 27 Question Id : 5626804874 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Rohingyas are refugees from which country?

'రొహింగ్యాలు' అనబడే శరణార్థులు ఏ దేశానికి చెందినవారు ?

(1) Bangladesh
బంగ్లాదేశ్

(2) Myanmar
మయన్మార్

(3) Maldives
మాల్దీవులు

(4) Sri Lanka
శ్రీలంక

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 28 Question Id : 5626804875 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Who is the Director General of National Security Guard ?

నేషనల్ సెక్యూరిటీ గార్డ్ యొక్క డైరెక్టర్ జనరల్ ఎవరు ?

(1) R.K. Singh
ఆర్. కె.సింగ్

(2) Prakash Singh
ప్రకాశ్ సింగ్

(3) Sudeep Lakhtakia
సుదీప్ లక్టాకియా

(4) S.P. Sharma
ఎస్. పి. శర్మ

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 29 Question Id : 5626804876 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

"Wigner Effect" is related to which of the following fields ?

'విగ్నర్ ఇఫెక్ట్' ఈ క్రింది వానిలో దేనికి సంబంధించినది ?

(1) Electro –Magnetic field
విద్యుత్ – అయస్కాంత క్షేత్రం

(2) Neutron Radiation
న్యూట్రాన్ రేడియేషన్

(3) Thermal Radiation
థర్మల్ రేడియేషన్

(4) Electricity
విద్యుచ్ఛక్తి

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 30 Question Id : 5626804877 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Asma Jahangir, a renowned human rights activist belonged to which country ?

పేరొందిన మానవ హక్కుల కార్యకర్త ఆస్మా జహంగీర్ ఏ దేశానికి చెందినవారు ?

(1) India
భారత దేశం

(2) Singapore
సింగపూర్

(3) Pakistan
పాకిస్తాన్

(4) Bangladesh
బంగ్లాదేశ్

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 31 Question Id : 5626804878 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

In which city was the world sustainable development summit held recently ?

ఇటివల జరిగిన ప్రపంచ స్థిరాభివృద్ధి సమ్మిట్ ఏ నగరంలో జరిగింది ?

(1) Dubai
దుబాయ్

(2) New Delhi
న్యూ ఢిల్లీ

(3) Abu Dhabi
అబుదాబి

(4) Jerusalem
జెరూసలెం

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 32 Question Id : 5626804879 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Who is the first Indian to win bronze medal at the Gymnastics world cup held recently ?

ప్రపంచ జిమ్నాస్టిక్స్ కప్‌లో కాంస్య పథకం సాధించిన ప్రప్రథమ భారతీయురాలు ఎవరు ?

(1) Aruna Budda reddy
అరుణ బుద్ద రెడ్డి

(2) Koneru Hampi
కోనేరు హంపి

(3) P.V. Sindhu
పి.వి. సింధు

(4) Geetha Phogat
గీత పోగట్

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 33 Question Id : 5626804880 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which State in India launched the country's first Social Innovation Centre ?

భారత దేశంలో మొదటి సామాజిక ఆవిష్కరణ కేంద్రం ఏ రాష్ట్రంలో ప్రారంభింపబడినది.

(1) Andhra Pradesh
ఆంధ్ర ప్రదేశ్

(2) Madhya Pradesh
మధ్య ప్రదేశ్

(3) Telangana
తెలంగాణ

(4) Gujarat
గుజరాత్

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 34 Question Id : 5626804881 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following campaign is aimed at achieving total result by October 2022?

ఈ క్రిందివానిలో ఏ ఉద్యమం, తన పూర్తి లక్ష్యాన్ని అక్టోబర్ 2022 నాటికి సాధించాలనుకుంటుంది ?

(1) Sakshar Bharat
సాక్షర్ భారత్

(2) Swachh Bharat
స్వచ్ఛ భారత్

(3) Training of all the teachers
ఉపాధ్యాయులందరికీ శిక్షణ

(4) Eradication of Malaria
మలేరియాను అరికట్టడం

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 35 Question Id : 5626804882 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

BHIM is an acronym for a utility item in which sector ?

BHIM అనే ఇంగ్లీష్ ప్రథమాక్షరనామం (ఎక్రోనిం) ఏ రంగంలో వాడుతారు

(1) Defence
రక్షణ

(2) Health Insurance
ఆరోగ్య భీమా

(3) Digital payments
అంకాత్మక చెల్లింపులు

(4) Gymnastics
జిమ్నాస్టిక్స్

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 36 Question Id : 5626804883 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The agency that decided to give free admission to courses for the 'third gender' candidates in 2017 is

తృతీయ లింగ అభ్యర్థులకు కోర్సులలో ఉచితంగా ప్రవేశం కల్పించాలని 2017 లో ఏ ప్రతినిధి సంస్థ నిర్ణయించింది

(1) UGC

(2) IGNOU

(3) AICTE

(4) NCTE

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 37 Question Id : 5626804884 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following angiogram relates to the heart?

ఈ క్రింది వానిలో ఏది హృదయానికి సంబంధించిన ఆంజియోగ్రామ్ ?

(1) Cerebral

సెరిబ్రల్

(2) Coronary

కారోనం

(3) Carotid

కెరోటిడ్

(4) Pulmonary

పల్మోనరి

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 38 Question Id : 5626804885 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which country tops the World Happiness Report -2017 ?

ప్రపంచ సంతోష నివేధిక 2017 ప్రకారం ఏ దేశం ప్రథమ స్థానంలో ఉంది ?

(1) Sweden

స్వీడన్

(2) Norway

నార్వే

(3) Denmark

డెన్మార్క్

(4) Ice land

ఐస్ లాండ్

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 39 Question Id : 5626804886 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

This sports Personality was awarded Padma Bhushan in 2018:

పద్మభూషన్ అవార్డు 2018 సం॥ క్రీడారంగంలో ఎవరికి ఇవ్వబడింది

(1) Damodar Ganesh Bapat

దామోదర్ గణేష్ బాపట్

(2) Pankaj Advani

పంకజ్ అద్వాని

(3) Somder Dev varman

సోమ్‌దేర్ దేవ్ వర్మన్

(4) Prafulla Govind Baruva

ప్రఫుల్లా గోవింద్ బరువా

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 40 Question Id : 5626804887 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Blue coloured ' Bal Aadhar' card is for:

నీలి రంగు 'బాల ఆధార్' కార్డు వీరి కోసం

(1) Children below 10 years

10 సం|| లోపు బాలల కోసం

(2) Children below 3 years

3 సం|| లోపు బాలల కోసం

(3) Children below 5 years

5 సం|| లోపు బాలల కోసం

(4) Children below 8 years

8 సం|| లోపు బాలల కోసం

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Display Number Panel: Yes
Group All Questions: No

Question Number : 41 Question Id : 5626804888 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If a difference arises between you and another teacher for some reason, what will you think is proper to resolve the issue:

నీకు మరియు యితర ఉపాధ్యాయుని మధ్య ఏ దేని కారణాల వలన విభేధాలేర్పడితే, ఆవిషయాన్ని పరిష్కరించడానికి ఏది సరియైనదని భావింతువు

(1) I will argue in front of other teachers

నేను యితర ఉపాధ్యాయుల ముందు వాదించెదను

(2) I will mock at that teacher

నేను ఆ ఉపాధ్యాయుని గేలి (mock) చేతును

(3) I will complain to the Principal

నేను ప్రధానోపాధ్యాయునికి ఫిర్యాదు చేతును

(4) I will try to know the cause of that in a peaceful manner

నేను ఆవిషయానికి సంబంధించిన కారణము ప్రశాంతంగా తెలుసుకొందును

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 42 Question Id : 5626804889 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If your students are quarrelling outside the school premises and you are present there, what will you do?

పాఠశాల ఆవరణలో మీ విద్యార్థులు మీరున్నచోట గొడవ పడుతుంటే, నీవు ఏమి చేతువు ?

(1) I will scold the students
నేను విద్యార్థులను దూషింతును

(2) I will remain busy in my work
నేను నాపనిలో నిమగ్నమౌదును

(3) I will not pay attention to it
నేను దానిపై దృష్టి పెట్టను

(4) I will try to pacify the students
నేను విద్యార్థులను శాంతబరచుటకు ప్రయత్నించెదను

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 43 Question Id : 5626804890 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

What will you do to make the students of your school disciplined?

మీ పాఠశాల విద్యార్థులలో క్రమశిక్షణ కలిగించుటకు నీ వేమి చేయుదువు ?

(1) I will give essay to write on the subject
నేను పాఠ్యవిషయము గూర్చిన వ్యాసము వ్రాయమందును

(2) I will give prizes to disciplined students
నేను క్రమ శిక్షణ గల విద్యార్థులకు బహుమతులు యిస్తాను

(3) I will deliver lecture on discipline
నేను క్రమ శిక్షణ పై ఉపన్యసిస్తాను

(4) I myself will remain disciplined
నేను స్వయంగా క్రమశిక్షణతో ఉంటాను

Options :

1. ✖ 1
2. ✔ 2

3. ✖ 3
4. ✖ 4

Question Number : 44 Question Id : 5626804891 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

In order to make the lesson interesting, the teacher should:

పాఠ్యబోధన ఆసక్తికరంగా చేయుటకు ఉపాధ్యాయుడు

(1) Prepare the lesson properly

పాఠానికి సక్రమంగా తయారవ్వాలి

(2) Do the blackboard work neatly

నల్ల బల్ల పని చక్కగా చేయాలి

(3) Develop the lesson gradually with the help of the students

పాఠాన్ని విద్యార్థుల సహకారంతో క్రమంగా పెంపొందించాలి

(4) Use the helping material to a great extent

బోధన సామగ్రిని అధిక మోతాదులో వినియోగించాలి

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 45 Question Id : 5626804892 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

As a teacher, your duty towards your students is:

ఉపాధ్యాయుడుగా విద్యార్థుల పట్ల నీ కర్తవ్యము

(1) That they should pass the examination

వారు పరీక్షలలో ఉత్తీర్ణులవుట

(2) They should improve themselves academically morally and culturally

వారు విద్యాపరంగా, నైతిక పరంగా మరియు సంస్కృతి పరంగా అభివృద్ధి చెందుట

(3) That they should attend the class

వారు తరగతులకు హాజరవుట

(4) That they should give attendance in the class

వారు తరగతి గదిలో హాజరు నమోదు చేసుకొనుట

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 46 Question Id : 5626804893 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

You have an aggressive student in your class, which of the following would you adopt to handle him?

మీ తరగతిలో ఒక దాడిచేసే విద్యార్థి ఉన్నాడు. క్రింది వాటిలో దేనిని అతడిని అరికట్టుటకు అవలింబించెదవు ?

(1) Punish him

అతడిని శిక్షింతును

(2) Put him in a frustrating situation

అతడిని విఫల (frustrating) పరిస్థితులలో ఉంచెదను

(3) Make him aware of the harmful consequences of aggression

అతడికి దాడి చేసే తత్వం యొక్క పర్యవసానాలు గూర్చి అవగాహన కలిగింతును

(4) Allow him to act aggressively

అతడి దాడి చేష్ట కొనసాగింతును

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 47 Question Id : 5626804894 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

A teacher should be _____ towards his students
ఉపాధ్యాయుడు విద్యార్థుల పట్ల _____ వుండాలి

(1) Sympathetic
సానుభూతి

(2) Supreme
పరమ శ్రేష్ఠంగా

(3) Tolerant
ఓర్చుకొను

(4) Out spoken
నిష్కపటంగా

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 48 Question Id : 5626804895 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

You want to ensure participation of more students in the class. Which of the following methods of teaching would you adopt?

నీవు తరగతిలో ఎక్కువ విద్యార్థులు నిర్దుష్టంగా పాల్గొనాలని ఆకాంక్షిస్తున్నావు. క్రింది ఏ బోధనా పద్ధతిని అవలంబించెదవు

(1) Discussion
చర్చ

(2) Recitation
కంఠస్థం

(3) Role – Play
నటన ప్రక్రియ

(4) Demonstration
ప్రదర్శన

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 49 Question Id : 5626804896 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

You want to develop cooperation and team spirit in students. Which activities would you propose?

విద్యార్థులలో మీరు సహకారము మరియు జట్టు స్ఫూర్తి పెంపొందించాలనుకున్నారు. ఏ కార్యక్రమాలు మీరు ప్రతిపాదిస్తారు ?

(1) Debate
బహిరంగా చర్చ

(2) Project work
ప్రకల్పన పని

(3) Quiz
ప్రశ్నావళి

(4) Art
కళ

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 50 Question Id : 5626804897 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

What would you do if you notice that students tend to doze off in your class?

మీ తరగతి గదిలో విద్యార్థులు తూలుతున్నట్లు గమనిస్తే మీరేమి చేస్తారు ?

(1) Reprimand them
వారిని మందలిస్తాను

(2) Stop teaching for a while
బోధించుట కొంతకాలం ఆపుతాను

(3) Give a command seeking attention
పాఠం పై దృష్టి సారించాలని ఆజ్ఞాపిస్తాను

(4) Provide them a chance to be Physically active
భౌతికంగా ఔత్సాహికంగా వుండుటకు ఒక అవకాశమిస్తాను

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Display Number Panel: Yes

Group All Questions: No

Question Number : 51 Question Id : 5626804898 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If n(A) = 5 and n(B) = 6 then the number of one – one functions defined from A to B is

n(A) = 5 మరియు n(B) = 6 అయినపుడు A నుంచి B కి నిర్వచించ గలిగే అన్వేక ప్రమేయాల సంఖ్య

(1) 720 (2) 120 (3) 30 (4) 36

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 52 Question Id : 5626804899 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If 0 is the binary operation defined on the set of all non zero real number $R^* = R - \{0\}$, by $aob = \frac{ab}{3}$ for all a, b ∈ R*, then the inverse of 4 in the group (R*, 0) is

శూన్యేతర వాస్తవ సంఖ్యల సమితి $R^* = R - \{0\}$, పై '0' అనే యుగ్మ పరిక్రియను ప్రతి a, b ∈ R* కు $aob = \frac{ab}{3}$ గా నిర్వచిస్తే సమూహం (R*, 0) లో 4 యొక్క విలోమము.

(1) $\frac{7}{4}$ (2) $\frac{9}{4}$ (3) $\frac{8}{3}$ (4) $\frac{6}{4}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 53 Question Id : 5626804900 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let (G, .) be a group and a, b ∈ G, n ∈ N. If $(a\,b\,a^{-1})^n = aba^{-1}$ then

(G, .) ఒక సమూహమనీ మరియు a, b ∈ G, n ∈ N అనీ అనుకొనుము $(a\,b\,a^{-1})^n = aba^{-1}$

అయినపుడు

(1) $b^n = b$ (2) $b^{n-1} = b$ (3) $b^{n+2} = b$ (4) $b^{n+1} = b$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 54 Question Id : 5626804901 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let Z_{14} be the set of all residue classes of integers modulo 14. Then in the group $(Z_{14}, +_{14})$, a solution of the equation $5x + \overline{4} = \overline{3}$ is

14 మాపంగా గల పూర్ణాంకాల అవశేష తరగతుల సమితి Z_{14} అయితే, సమూహం

$(Z_{14}, +_{14})$ లో సమీకరణం $5x + \overline{4} = \overline{3}$ కి ఒక సాధన

(1) $\overline{2}$ (2) $\overline{3}$ (3) $\overline{9}$ (4) $\overline{11}$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 55 Question Id : 5626804902 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If f, g ∈ S_5 and f = (1 3 2 4), g = (1 5 4 3) then fg =

f, g ∈ S_5 మరియు f = (1 3 2 4), g = (1 5 4 3) అయినపుడు fg =

(1) (1 5) (2 3) (2) (1 5) (2 4) (3) (1 2) (5 3) (4) (1 3) (2 4)

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3

4. ✖ 4

Question Number : 56 Question Id : 5626804903 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let G be a group and a ∈ G. If 0(a) = 80 then 0 (a^6) =

G ఏదేని సమూహమని మరియు a ∈ G అనుకొనుము 0(a) = 80 అయితే 0 (a^6) =

(1) 35 (2) 40 (3) 20 (4) 60

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 57 Question Id : 5626804904 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If G is a cyclic group of order 150, then the number of subgroups of G is

150 ని తరగతిగా గల చక్రీయ సమూహం G కి గల ఉపసమూహాల సంఖ్య

(1) 30 (2) 12 (3) 15 (4) 10

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 58 Question Id : 5626804905 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If H_1 and H_2 are any two subgroups of order 11 and 17 in a finite group G respectively then the order of the subgroup $H_1 \cap H_2$ is

పరిమిత సమూహం G లో H_1 మరియు H_2 అనే ఉపసమూహాల తరగతులు వరుసగా 11 మరియు 17 అయినపుడు ఉపసమూహం $H_1 \cap H_2$ తరగతి

(1) 6 (2) 11 (3) 1 (4) 17

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 59 Question Id : 5626804906 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The number of generators in an infinite cyclic group is

అనంత చక్రీయ సమూహంలోని జనక మూలకాల సంఖ్య

(1) 2 (2) 1 (3) 0 (4) Infinite

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 60 Question Id : 5626804907 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If A_n is the alternating group on n symbols then the order of A_5

n సంకేతాల పై నిర్వచించబడిన ఏకాంతర సమూహం A_n అయితే A_5 యొక్క తరగతి

(1) 60 (2) 120 (3) 30 (4) 25

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 61 Question Id : 5626804908 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following is a maximal ideal in the ring $(\mathbf{Z}, +, \cdot)$

$(\mathbf{Z}, +, \cdot)$ అనే వలయానికి ఈ క్రింద ఇచ్చిన వాటిలో ఏది అధికతమ ఆదర్శం

(1) $8\mathbf{Z}$ (2) $6\mathbf{Z}$ (3) $10\mathbf{Z}$ (4) $7\mathbf{Z}$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 62 Question Id : 5626804909 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The number of homorphisms form the ring of integers Z to Z is
పూర్ణ సంఖ్యల వలయం Z నుండి Z కి గల సమరూపతల సంఖ్య

(1) 1 (2) 2 (3) 0 (4) Infinite అనంతం

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 63 Question Id : 5626804910 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let S = $M_{2x2}(\mathbf{R})$ be the ring of 2x2 matrices with real entries. Then which of the following `statements is not true

వాస్తవ సంఖ్యలను మూలకాలుగా కల్గిన 2x2 మాత్రికల వలయం S = $M_{2x2}(\mathbf{R})$ అనుకొనుము అప్పుడు ఈ క్రింది ప్రవచనాలలో ఏది నిజం కాదు.

(1) $S_1 = \left\{\begin{bmatrix} a & 0 \\ b & 0 \end{bmatrix} \mid a,b \in R\right\}$ is a left ideal of S

S కు $S_1 = \left\{\begin{bmatrix} a & 0 \\ b & 0 \end{bmatrix} \mid a,b \in R\right\}$ ఒక ఎడమ ఆదర్శం అవుతుంది

(2) $S_2 = \left\{\begin{bmatrix} a & b \\ 0 & 0 \end{bmatrix} \mid a,b \in R\right\}$ is a right ideal of S

S కు $S_2 = \left\{\begin{bmatrix} a & b \\ 0 & 0 \end{bmatrix} \mid a,b \in R\right\}$ కు ఒక కుడి ఆదర్శం అవుతుంది

(3) $S_3 = \left\{\begin{bmatrix} a & 0 \\ 0 & b \end{bmatrix} \mid a,b \in R\right\}$ is a subring of S

S కు $S_3 = \left\{\begin{bmatrix} a & 0 \\ 0 & b \end{bmatrix} \mid a,b \in R\right\}$ ఒక ఉపవలయం అవుతుంది

(4) $S_3 = \left\{\begin{bmatrix} a & 0 \\ 0 & b \end{bmatrix} \mid a,b \in R\right\}$ is an ideal of S

S కు $S_3 = \left\{\begin{bmatrix} a & 0 \\ 0 & b \end{bmatrix} \mid a,b \in R\right\}$ ఒక ఆదర్శమవుతుంది

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 64 Question Id : 5626804911 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The set of all units in the $(Z_{12}, +_{12}, \cdot_{12})$ is

$(Z_{12}, +_{12}, \cdot_{12})$ వలయంలో విలోమ్యమూలకాల సమితి

(1) $\{5, 7, 9, 11\}$ (2) $\{3, 7, 5, 9\}$

(3) $\{1, 5, 7, 11\}$ (4) $\{3, 5, 7, 11\}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 65 Question Id : 5626804912 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

In the ring Z_5 [x], $(2x + 3x^2).(1+4x) =$

Z_5 [x] వలయంలో $(2x + 3x^2).(1+4x) =$

(1) $2x^3 + x^2 + 2x$ (2) $x^3 + 2x^2 + 2x$

(3) $x^3 + x^2 + 2$ (4) $2x^3 + 2x$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 66 Question Id : 5626804913 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let S be any set and P(S) be its power set then in the ring (P(S), Δ, ∩), the zero element is

S ఏదేని సమితి అనీ, P(S) దాని యొక్క ఘాత సమితి అనీ అనుకొనుము అపుడు

$(P(S), \Delta, \cap)$ అనే వలయంలో శూన్య మూలకం

(1) S (2) P (S) (3) ϕ (4) P(P(S))

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 67 Question Id : 5626804914 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The set of all idempotent elements in the ring $(Z_{10}, +_{10}, \cdot_{10})$

వలయం $(Z_{10}, +_{10}, \cdot_{10})$ లో అపరివర్తిత మూలకాల సమితి

(1) $\{\bar{0}, \bar{1}, \bar{7}, \bar{6}\}$ (2) $\{\bar{0}, \bar{1}, \bar{4}, \bar{6}\}$ (3) $\{\bar{0}, \bar{1}, \bar{3}\}$ (4) $\{\bar{0}, \bar{1}, \bar{5}, \bar{6}\}$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 68 Question Id : 5626804915 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The order and the degree of the differential equation $y = \sqrt{x}\frac{dy}{dx} + \frac{2}{\frac{dy}{dx}}$

$y = \sqrt{x}\frac{dy}{dx} + \frac{2}{\frac{dy}{dx}}$ అవకలన సమీకరణపు తరగతి మరియు ఘాతములు

(1) 1, 2 (2) 1, 1 (3) 2, 1 (4) 2, 2

Options :

1. ✔ 1

2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 69 Question Id : 5626804916 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$y = C(x - C)^2$, where C is an arbitrary constant, is a solution of the differential equation

C యాదృచ్ఛిక స్థిరరాశి అయితే $y = C(x - C)^2$ ను సాధనగా కల్గిన అవకలన సమీకరణం

(1) $y' = 4y(xy' - 2y)$ (2) $(y')^2 = 4y(xy' - 2y)$

(3) $(y')^3 = 4y(xy' - 2y)$ (4) $yy' = 4(xy' - 2y)$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 70 Question Id : 5626804917 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $W(f_1(x), f_2(x).....f_n(x))$ represents the wronskian of the functions $f_1(x), f_2(x)....f_n(x)$ then $W(e^x, e^{2x}, e^{3x})$ at $x = \frac{1}{6}$ is

$W(f_1(x), f_2(x).....f_n(x))$ అనేది $f_1(x), f_2(x)....f_n(x)$ ప్రమేయాల రాన్‌స్కియన్ (wronskian) అయితే $x = \frac{1}{6}$ వద్ద $W(e^x, e^{2x}, e^{3x})$

(1) 4 e (2) 3 e (3) 2 e (4) e

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 71 Question Id : 5626804918 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The general solution of the equation $\sec^2 x \tan y\, dx + \sec^2 y \tan x\, dy = 0$

$\sec^2 x \tan y\, dx + \sec^2 y \tan x\, dy = 0$ సమీకరణం యొక్క సాధారణ సాధన

(1) $\tan x + \tan y = C$

(2) $\tan x \tan y = C$

(3) $\tan x - \tan y = C$

(4) $\tan^2 x - \tan^2 y = C$

(Here C is an arbitrary constant)

ఇక్కడ C ఒక యాదృచ్ఛిక స్థిరరాశి

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 72 Question Id : 5626804919 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The general solution of the differential equation $\frac{dy}{dx} = \frac{y}{x} + \cos\left(\frac{y}{x}\right)$ is

అవకలన సమీకరణం $\frac{dy}{dx} = \frac{y}{x} + \cos\left(\frac{y}{x}\right)$ యొక్క సాధారణ సాధన

(1) $\sec\left(\frac{y}{x}\right) + \tan\left(\frac{y}{x}\right) = Cx$

(2) $\sec\left(\frac{y}{x}\right) - \tan\left(\frac{y}{x}\right) = Cx$

(3) $\sec\left(\frac{y}{x}\right) = Cx$

(4) $x\sec\left(\frac{y}{x}\right) = C\tan\left(\frac{y}{x}\right)$

(Here C is an arbitrary constant)

ఇక్కడ C ఒక యాదృచ్ఛిక స్థిరరాశి

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 73 Question Id : 5626804920 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The value of K for which the differential equation $(3x^2 + kxy)\,dx + (2x^2+2y)dy = 0$ is exact

అవకలన సమీకరణం $(3x^2 + kxy)\,dx + (2x^2+2y)dy = 0$ యథార్థం అయ్యేటట్లుగా వుండే K విలువ

(1) 1 (2) 2 (3) 3 (4) 4

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 74 Question Id : 5626804921 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$d(\sin^{-1}(xy)) =$

(1) $\frac{x\,dy - y\,dx}{\sqrt{1-x^2y^2}}$ (2) $\frac{x\,dy + y\,dx}{\sqrt{1-x^2y^2}}$ (3) $\frac{x\,dy - y^2dx}{\sqrt{1-x^2y^2}}$ (4) $\frac{x\,dy - y\,dx}{\sqrt{1+x^2y^2}}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 75 Question Id : 5626804922 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

An integrating factor of the differential equation $(x^3 - 2y^2)\,dx + 2xy\,dy = 0$ is

అవకలన సమీకరణం $(x^3 - 2y^2)\,dx + 2xy\,dy = 0$ యొక్క ఒక సమాకలన గుణకము

(1) $\frac{1}{x^2}$ (2) $\frac{1}{x}$ (3) $\frac{1}{y}$ (4) $\frac{1}{x^3}$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 76 Question Id : 5626804923 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following is a linear differential equation

ఈ క్రింది ఇవ్వబడిన వాటిలో రేఖీయ అవకలన సమీకరణం

(1) $y''+xy'-5y=0$

(2) $y'.y''-5y=0$

(3) $(y')^2+\cos^2 x=4e^x$

(4) $y.\ y'.\ y''=3x^2+2x$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 77 Question Id : 5626804924 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The orthogonal trajectories of the family of curves $ay^2=x^3$, where a is a parameter, is

A పరామితి అయినపుడు $ay^2=x^3$ అనే వక్రాల కుటుంబపు లంబ సంచేదములు

(1) $2x^2+3y^2=C$

(2) $2x^2-3y^2=C$

(3) $3x^2+2y^2=C$

(4) $3x^2-2y^2=C$

(Here C is an arbitrary constant)

ఇక్కడ C ఒక యాదృచ్ఛిక స్థిరరాశి

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 78 Question Id : 5626804925 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The singular solution of the differential equation $y = px + \frac{a}{p}, (where\ p = \frac{dy}{dx})$ is

అవకలన సమీకరణం $y = px + \frac{a}{p}$ (ఇక్కడ $p = \frac{dy}{dx}$), యొక్క విలక్షణ సాధన

(1) $x^2 = 4ay$ (2) $x^2 + y^2 = a$ (3) $y^2 = 4ax$ (4) $x^2 - y^2 = a^2$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 79 Question Id : 5626804926 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The general solution of the differential equation $(D^4 - 3D^2 - 4)y = 0$ where $D \equiv \frac{d}{dx}$ is

అవకలన సమీకరణం $(D^4 - 3D^2 - 4)y = 0$ యొక్క సాధారణ సాధన (ఇక్కడ $D \equiv \frac{d}{dx}$)

(1) $y = C_1 e^x + C_2 e^{-x} + C_3 \cos x + C_4 \sin x$

(2) $y = C_1 e^{2x} + C_2 e^{-2x} + C_3 \cos x + C_4 \sin x$

(3) $y = C_1 \cos 2x + C_2 \sin 2x + C_3 \cos x + C_4 \sin x$

(4) $y = C_1 \cos 4x + C_2 \sin 4x + C_3 e^x + C_4 e^{-x}$

(Here C_1, C_2, C_3, C_4 are arbitrary constants)

ఇక్కడ C_1, C_2, C_3, C_4 ఒక యాదృచ్ఛిక స్థిరరాశులు

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 80 Question Id : 5626804927 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

A particular integral of the differential equation $(4D^2 + 12\,D + 9)\,y = 9e^{-3x}$ is

(where $D \equiv \frac{d}{dx}$)

అవకలన సమీకరణం $(4D^2 + 12\,D + 9)\,y = 9e^{-3x}$ (ఇక్కడ $D \equiv \frac{d}{dx}$) యొక్క ప్రత్యేక సమాకలని

(1) $x\,e^{-3x}$ (2) e^{-3x} (3) $x^2\,e^{-3x}$ (4) $9\,xe^{-3x}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 81 Question Id : 5626804928 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\frac{1}{D^4 - m^4}\sin mx =$$

(1) $\frac{x}{4m^3}\cos mx$ (2) $\frac{x}{4m^3}\sin mx$ (3) $\frac{x}{2m^2}\cos mx$ (4) $\frac{x}{2m^2}\sin mx$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 82 Question Id : 5626804929 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\frac{1}{(D-2)^2}8x^2 =$$

(1) $x^2 + x + 3$ (2) $x^2 + 4x + 3$ (3) $2x^2 + 4x + 3$ (4) $2x^2 + 2x + 3$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3

4. ✖ 4

Question Number : 83 Question Id : 5626804930 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\frac{1}{D^2-6D+9}e^{3x}\sin x =$$

(1) $e^{3x}\cos x$ (2) $-e^{3x}\sin x$ (3) $e^{-3x}\sin x$ (4) $e^{-3x}\cos x$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 84 Question Id : 5626804931 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The general solution of the differential equation $(x^2 D^2 - 3x D + 4)\, y = 0$ is

అవకలన సమీకరణం $(x^2 D^2 - 3x D + 4)\, y = 0$ యొక్క సాధారణ సాధన

(1) $C_1 x + C_2 x^2$ (2) $C_1 + C_2 \log x$

(3) $(C_1 + C_2 \log x)x^2$ (4) $C_1 e^x + C_2 e^{-x}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 85 Question Id : 5626804932 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\frac{1}{D-1}\sin(e^{-x})$$

(1) $e^x \cos(e^{-x})$ (2) $e^{-x}\cos(e^{-x})$ (3) $e^x \sin(e^{-x})$ (4) $e^{-x}\sin(e^{-x})$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 86 Question Id : 5626804933 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a vector space

ఈ క్రింది వాటిలో సదిశాంతరాళం కానిది

(1) C(C) (2) R(R) (3) R(C) (4) C(R)

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 87 Question Id : 5626804934 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following is not a subspace of the vector space $R^3(R)$

సదిశాంత రాళం $R^3(R)$ కు ఈ క్రింది ఇచ్చిన వాటిలో ఉపాంత రాళం కానిది

(1) $W_1 = \{(a_1, a_2, 0) / a , a_2 \in R\}$ (2) $W_2 = \{ (a_1, a_2, a_3) / a_3 = a_2 + 1\}$

(3) $W_3 = \{(a_1, a_2, a_3) / a_1 - 3a_2 + 4a_3 = 0\}$ (4) $W_4 = \{(a_1, a_2, a_3) / a_2 + a_3 = 0\}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 88 Question Id : 5626804935 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $(1, 7, -4) = a(1, 0, 0) + b(1, 1, 0) + c(1, 1, 1)$ then $(a, b, c) =$

$(1, 7, -4) = a(1, 0, 0) + b(1, 1, 0) + c(1, 1, 1)$ అయినపుడు $(a, b, c) =$

(1) (6, 11, 4) (2) (– 6, 11 – 4) (3) (-6, 11, 4) (4) (– 6, -11, – 4)

Options :

1. ✖ 1
2. ✔ 2

3. ✖ 3
4. ✖ 4

Question Number : 89 Question Id : 5626804936 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If vectors (1, 3, 1), (2, k, 0), (0, 4, 1) are linearly dependent then k =

(1, 3, 1), (2, k, 0), (0, 4, 1) అనే సదిశలు ఋజు పరాధీనాలు (అస్వతంత్ర్యాలు) అయితే k =

(1) 2 (2) –2 (3) 1 (4) 3

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 90 Question Id : 5626804937 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The dimension of the subspace

$W = \{(x, y, z, w) / x, y, z, w \in R, x - y + z - w = 0\}$ in the vector space $R^4(R)$ is

సదిశాంతరాళం $R^4(R)$ లో $W = \{(x, y, z, w) / x, y, z, w \in R, x - y + z - w = 0\}$ అనే ఉపాంతరాళపు పరిమాణం

(1) 4 (2) 3 (3) 2 (4) 1

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 91 Question Id : 5626804938 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If the linear transformation $T : R^2 \to R$ is given by $T(1, 1) = 3, T(0, 1) = -2$ then $T(a, b) =$

ఋజు పరివర్తన $T : R^2 \to R$ ను $T(1, 1) = 3, T(0, 1) = -2$ గా ఇచ్చినపుడు $T(a, b) =$

(1) 5a + 2b (2) 5a - 2b (3) 2a - 5b (4) 2a + 5b

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 92 Question Id : 5626804939 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Nullity of the linear transformation $T : R^3 \to R^2$ defined by $T(a, b, c) = (a + b, b + c)$

బుజు పరివర్తన $T : R^3 \to R^2$ ను $T(a, b, c) = (a + b, b + c)$ నిర్వచిస్తే T యొక్క శూన్యత

(1) 1 (2) 2 (3) 3 (4) 0

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 93 Question Id : 5626804940 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The matrix of the linear transformation $T : R^2 \to R^3$ relative to the bases $B_1 = \{(1, 3), (2, 5)\}$ and $B_2 \{(1, 0, 0), (0,1, 0), (0, 0, 1)\}$ where $T(x, y) = (3x - y, y, -y)$

$T : R^2 \to R^3$ అనే బుజు పరివర్తనను $T(x, y) = (3x - y, y, -y)$ గా నిర్వచించినపుడు

$B_1 = \{(1, 3), (2, 5)\}$ మరియు $B_2 \{(1, 0, 0), (0,1, 0), (0, 0, 1)\}$ అనే ఆధారాల దృష్ట్యా T యొక్క మాత్రిక

(1) $\begin{bmatrix} 0 & 4 & 2 \\ 1 & 3 & -7 \end{bmatrix}$ (2) $\begin{bmatrix} 0 & 4 \\ -1 & 5 \\ 2 & 3 \end{bmatrix}$ (3) $\begin{bmatrix} 0 & 1 \\ 3 & 5 \\ -3 & -5 \end{bmatrix}$ (4) $\begin{bmatrix} 1 & -2 \\ 2 & -3 \\ 3 & 4 \end{bmatrix}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 94 Question Id : 5626804941 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $A=\begin{bmatrix}2 & 0\\ 3 & 4\end{bmatrix}$ then $A^{-1}=$

$A=\begin{bmatrix}2 & 0\\ 3 & 4\end{bmatrix}$ అయినపుడు $A^{-1}=$

(1) $\frac{3}{4}A+\frac{1}{8}I$ (2) $\frac{3}{4}A-\frac{1}{8}I$ (3) $\frac{1}{8}A-\frac{3}{4}I$ (4) $-\frac{1}{8}A+\frac{3}{4}I$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 95 Question Id : 5626804942 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The eigen values of the matrix $A=\begin{bmatrix}2 & 1 & 1\\ 1 & 2 & 1\\ 0 & 0 & 1\end{bmatrix}$ are

$A=\begin{bmatrix}2 & 1 & 1\\ 1 & 2 & 1\\ 0 & 0 & 1\end{bmatrix}$ మాత్రిక యొక్క ఐగన్ విలువలు

(1) -1, 3, 3 (2) 1, 2, 2 (3) 1, 1, 3 (4) 1, 2, 3

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 96 Question Id : 5626804943 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $A=\begin{bmatrix}1 & 0\\ \frac{1}{2} & 1\end{bmatrix}$ then $A^{100}=$

$A=\begin{bmatrix}1 & 0\\ \frac{1}{2} & 1\end{bmatrix}$ అయిపుడు $A^{100}=$

(1) $\begin{bmatrix}100 & 0\\ 1 & 1\end{bmatrix}$ (2) $\begin{bmatrix}1 & 0\\ 100 & 1\end{bmatrix}$ (3) $\begin{bmatrix}1 & 0\\ 50 & 1\end{bmatrix}$ (4) $\begin{bmatrix}100 & 0\\ 100 & 1\end{bmatrix}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 97 Question Id : 5626804944 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Rank of the matrix $A=\begin{bmatrix}0 & 1 & -3 & -1\\ 1 & 0 & 1 & 1\\ 3 & 1 & 0 & 2\\ 1 & 1 & -2 & 0\end{bmatrix}$

$A=\begin{bmatrix}0 & 1 & -3 & -1\\ 1 & 0 & 1 & 1\\ 3 & 1 & 0 & 2\\ 1 & 1 & -2 & 0\end{bmatrix}$ అనే మాత్రిక యొక్క కోటి

(1) 4 (2) 3 (3) 2 (4) 1

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 98 Question Id : 5626804945 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let V(F) be an innerproduct space and x, y ∈ V. Then which of the following is not true

V(F) ఒక అంతర్లబ్ధాంతరాళం అనీ, x, y ∈ V అనీ అనుకొనుము అపుడు ఈ క్రింది వాటిలో సరి కానిది ఏది ?

(1) $\| x + y\|^2 + \|x - y\|^2 = 2 (\| x \|^2 + \| y \|^2)$

(2) $| < x , y > | \leq \|x\| \ \| y \|$

(3) $\| x + y\|^2 - \|x - y\|^2 = 4 \text{ Re} < x , y >$

(4) $\| x + y\|^2 - \|x - y\|^2 = 4 \text{ Im} < x, y >$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 99 Question Id : 5626804946 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let V_3 (R) be the inner product space with standard inner product. Then the vector of unit length which is orthogonal to $(4, 2, 3) \in V_3(R)$

ప్రామాణిక అంతర్లబ్ధం దృష్ట్యా V_3 (R) ఒక అంతర్లబ్ధాంతరాళం అనుకొనుము అపుడు

సదిశ $(4, 2, 3) \in V_3(R)$ కు యూనిట్ అభిలంబ సదిశ

(1) (1, 2, 3)

(2) $(\frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}}, \frac{1}{\sqrt{3}})$

(3) $\left(\frac{-2}{3}, \frac{1}{3}, \frac{2}{3}\right)$

(4) $\left(\frac{4}{\sqrt{29}}, \frac{2}{\sqrt{29}}, \frac{3}{\sqrt{29}}\right)$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 100 Question Id : 5626804947 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Equation of the plane passing through the points A(-1, 2, -2), B (0, 1, 1) and C (1, 1, 2)

A(-1, 2, -2), B (0, 1, 1) మరియు C (1, 1, 2) బిందువుల గుండ పోవు తలం సమీకరణం

(1) $x - 2y + z + 3 = 0$

(2) $x - 2y - z + 3 = 0$

(3) $x + 2y + z + 3 = 0$

(4) $2x + y - z + 8 = 0$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 101 Question Id : 5626804948 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The image of the point P(1, 2, 3) with respect to the plane $x + z = 0$

$x + z = 0$ తలం దృష్ట్యా P(1, 2, 3) అనే బిందువు యొక్క ప్రతిబింబం

(1) (-3, 2, -1)

(2) (3, 2, 1)

(3) (3, -2, -1)

(4) (1, 2, 3)

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 102 Question Id : 5626804949 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Angle between the planes $2x - y - z = 3$ and $3x + 5y + z = 4$ is

$2x - y - z = 3$ మరియు $3x + 5y + z = 4$ అనే తలాల మధ్య కోణం

(1) $\frac{\pi}{6}$

(2) $\frac{\pi}{4}$

(3) $\frac{\pi}{2}$

(4) $\frac{\pi}{3}$

Options :

1. ✖ 1

2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 103 Question Id : 5626804950 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The distance between the planes

$2x - 2y + z + 3 = 0$ and $4x - 4y + 2z + 5 = 0$ is

$2x - 2y + z + 3 = 0$ మరియు $4x - 4y + 2z + 5 = 0$ అనే తలాల మధ్య దూరం

(1) $\frac{1}{3}$ (2) $\frac{1}{5}$ (3) $\frac{1}{6}$ (4) $\frac{1}{8}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 104 Question Id : 5626804951 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Equation of the plane which passes through the points P (3, –3, –1) and is parallel to the plane

$2x + 3y + 5z + 6 = 0$ is

$2x + 3y + 5z + 6 = 0$ అనే తలానికి సమాంతరంగా ఉంటూ P (3, –3, –1) బిందువు గుండా పోవు తలం సమీకరణం

(1) $2x + 3y + 5z + 7 = 0$ (2) $2x + 3y + 5z + 6 = 0$ \

(3) $2x + 3y + 5z + 8 = 0$ (4) $2x + 3y + 5z - 9 = 0$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 105 Question Id : 5626804952 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Angle between the plane $x + y + z = 4$ and the line $\frac{x-1}{1} = \frac{y-2}{2} = \frac{z-3}{3}$ is

$x + y + z = 4$ తలానికి $\frac{x-1}{1} = \frac{y-2}{2} = \frac{z-3}{3}$ రేఖకు మధ్యగల కోణం

(1) $\cos^{-1}\left(\sqrt{\frac{6}{7}}\right)$

(2) $\sin^{-1}\left(\sqrt{\frac{6}{7}}\right)$

(3) $\cos^{-1}\left(\sqrt{\frac{7}{6}}\right)$

(4) $\sin^{-1}\left(\sqrt{\frac{7}{6}}\right)$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 106 Question Id : 5626804953 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The point of intersection of the lines

$\frac{x-1}{2} = \frac{y+1}{-3} = \frac{z+10}{8}$ and $\frac{x-4}{1} = \frac{y+3}{-4} = \frac{z+1}{7}$

$\frac{x-1}{2} = \frac{y+1}{-3} = \frac{z+10}{8}$ మరియు $\frac{x-4}{1} = \frac{y+3}{-4} = \frac{z+1}{7}$ అనే రేఖల ఖండన బిందువు

(1) (5, 7, 6)

(2) (−5, 7, 6)

(3) (5, −7, 6)

(4) (5, −7, − 6)

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 107 Question Id : 5626804954 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The shortest distance between the lines

$\frac{x-3}{-1}=\frac{y-4}{2}=\frac{z+2}{1}$ and $\frac{x-1}{1}=\frac{y+7}{3}=\frac{z+2}{2}$ is

$\frac{x-3}{-1}=\frac{y-4}{2}=\frac{z+2}{1}$ మరియు $\frac{x-1}{1}=\frac{y+7}{3}=\frac{z+2}{2}$ అనే రేఖల మధ్య అల్పతమ దూరం

(1) 35units (2) $\sqrt{35}$ units (3) 25 units (4) 20 units

35 యూనిట్‌లు $\sqrt{35}$ యూనిట్‌లు 25 యూనిట్‌లు 20 యూనిట్‌లు

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 108 Question Id : 5626804955 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Equation of the sphere with A (2, 3, -1) and B (4, 1, 1) as the ends of the diameter

A (2, 3, -1) మరియు B (4, 1, 1) అను వ్యాసాగ్రాలుగా గల గోళ సమీకరణం

(1) $x^2+y^2+z^2-6x-4y-z+10=0$

(2) $x^2+y^2+z^2-6x-4y+10=0$

(3) $x^2+y^2+z^2-6x-4y+12=0$

(4) $x^2+y^2+z^2+6x-4y-12=0$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 109 Question Id : 5626804956 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The points of intersection of the line

$\frac{x+3}{4}=\frac{y+4}{3}=\frac{z-8}{-5}$ and the sphere $x^2+y^2+z^2+2x-10y-23=0$

$\frac{x+3}{4}=\frac{y+4}{3}=\frac{z-8}{-5}$ అనే సరళ రేఖ, $x^2+y^2+z^2+2x-10y-23=0$ అనే గోళాల ఖండన బిందువులు

(1) (1, 2, 3), (2, 1, 5)

(2) (–1, –1, 3), (5, 1, 2)

(3) (1, 1, 3), (5, –2, 2)

(4) (1, –1, 3), (5, 2, –2)

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 110 Question Id : 5626804957 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If the two spheres $x^2+y^2+z^2+2ky+2z+8=0$ and $x^2+y^2+z^2+6x+8y+4z+20=0$ are orthogonal then the value of k =

$x^2+y^2+z^2+2ky+2z+8=$ మరియు $x^2+y^2+z^2+6x+8y+4z+20=0$ అనే గోళాలు లంబంగా ఖండించు కొన్నట్లయితే k =

(1) 1

(2) 3

(3) 2

(4) 4

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 111 Question Id : 5626804958 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Pole of $2x + 3y + 4z = 12$ with respect to the sphere $x^2 + y^2 + z^2 = 36$

$x^2 + y^2 + z^2 = 36$ అనే గోళం దృష్ట్యా $2x + 3y + 4z = 12$ అనే తలం యొక్క ధ్రువం

(1) (6, 12, 9) (2) (9, 6, 12) (3) (9, 12, 6) (4) (6, 9, 12)

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 112 Question Id : 5626804959 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The vertex of the cone

$7x^2 + 2y^2 + 2z^2 - 10zx + 10xy + 26x - 2y + 2z - 17 = 0$

$7x^2 + 2y^2 + 2z^2 - 10zx + 10xy + 26x - 2y + 2z - 17 = 0$ అనే శంఖువు యొక్క శీర్షం

(1) (-1, 2, 2) (2) (1, -2, 2) (3) (1, 2, 2) (4) (1, 2, -2)

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 113 Question Id : 5626804960 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The reciprocal cone of $2x^2 + 3y^2 + 4z^2 = 0$ is

$2x^2 + 3y^2 + 4z^2 = 0$ యొక్క వ్యుత్క్రమ శంఖువు

(1) $xy + yz + zx = 0$ (2) $\frac{x^2}{3} + \frac{y^2}{4} + \frac{z^2}{2} = 0$

(3) $\frac{x^2}{2} + \frac{y^2}{3} + \frac{z^2}{4} = 0$ (4) $2xy + 3yz + 4zx = 0$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 114 Question Id : 5626804961 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The equation of the tangent plane at the point (-3, 0, -1) to the cone

$4x^2 - y^2 + 2z^2 + 2xy - 3yz + 12x - 11y + 6z + 4 = 0$

$4x^2 - y^2 + 2z^2 + 2xy - 3yz + 12x - 11y + 6z + 4 = 0$ శంఖువుకి (-3, 0, -1) వద్ద స్పర్శ తలము సమీకరయణం

(1) $6x + 7y - z + 17 = 0$

(2) $6x - 7y - z + 17 = 0$

(3) $6x + 7y + z - 17 = 0$

(4) $6x + y - 7z - 17 = 0$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 115 Question Id : 5626804962 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following sets is not closed

ఈ క్రింది సమితులలో సంవృత సమితి కానిది

(1) Q (2) R (3) {1, 2, 3} (4) [0, 1]

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 116 Question Id : 5626804963 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following sets is an open set

ఈ క్రింది సమితులలో వివృత సమితి

(1) Q (2) (a, b) (3) {1, 2, 3} (4) [a, b]

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 117 Question Id : 5626804964 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\lim_{x\to 0}\frac{xe^x-\log(1+x)}{x^2}$$

(1) $\frac{3}{2}$ (2) $\frac{5}{2}$ (3) $\frac{7}{2}$ (4) $\frac{9}{2}$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 118 Question Id : 5626804965 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Infimum of the set $A=\left\{\frac{m}{n}+4\frac{n}{m} / m,n,\in N\right\}$

సమితి $A=\left\{\frac{m}{n}+4\frac{n}{m} / m,n,\in N\right\}$ కు గరిష్ఠ దిగువ హద్దు

(1) 1 (2) 2 (3) 3 (4) 4

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 119 Question Id : 5626804966 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let a, b ∈ R. Then which of the following is true

a, b ∈ R అను కొనుము అపుడు ఈ క్రింద ఇచ్చిన వాటిలో ఏది సరైనది

(1) $\max(a, b) = \frac{a+b+|a-b|}{2}$

(2) $\max(a, b) = \frac{a-b+|a-b|}{2}$

గరిష్ఠ $(a, b) = \frac{a+b+|a-b|}{2}$

గరిష్ఠ $(a, b) = \frac{a-b+|a-b|}{2}$

(3) $\min(a, b) = \frac{a+b+|a+b|}{2}$

(4) $\min(a, b) = \frac{a-b+|a+b|}{2}$

కనిష్ఠ $(a, b) = \frac{a+b+|a+b|}{2}$

కనిష్ఠ $(a, b) = \frac{a-b+|a+b|}{2}$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 120 Question Id : 5626804967 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\bigcap_{n=1}^{\infty}\left(3-\frac{1}{n}, 3+\frac{1}{n}\right) =$$

(1) {0} (2) {3} (3) {1} (4) {2}

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 121 Question Id : 5626804968 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $x_n = \left(\frac{100}{101}\right)^n$, then the sequence $\{x_n\}$

$x_n = \left(\frac{100}{101}\right)^n$ అయినపుడు $\{x_n\}$ అనే అనుక్రమం

(1) convergent (2) Divergent (3) Oscillators (4) unbounded

అభిసరిస్తుంది అపసరిస్తుంది డోలనం చెందును అపరిబద్ధము

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 122 Question Id : 5626804969 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\lim_{n\to\infty}\frac{1}{n}\left[1+2^{1/n}+3^{1/n}+.....+n^{1/n}\right]=$$

(1) 2 (2) 3 (3) 1 (4) 0

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 123 Question Id : 5626804970 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $x_1 = \sqrt{7}, x_{n+1} = \sqrt{7+x_n}$ then the sequence $\{x_n\}$ converges to the positive root of

$x_1 = \sqrt{7}, x_{n+1} = \sqrt{7+x_n}$ అయితే $\{x_n\}$ అనుక్రమం ఈ క్రింది సమీకరణపు ధనాత్మక మూలానికి అభిసరిస్తుంది.

(1) $x^2+x-7=0$ (2) $x^2-x-7=0$

(3) $x^2-7x-1=0$ (4) $x^2-7x-7=0$

Options :

1. ✖ 1

2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 124 Question Id : 5626804971 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\sum_{n=1}^{100} \frac{1}{4n^2-1}$$

(1) $\frac{200}{201}$ (2) $\frac{100}{201}$ (3) $\frac{201}{200}$ (4) $\frac{201}{100}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 125 Question Id : 5626804972 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following series is not convergent

ఈ క్రింది ఇవ్వబడిన శ్రేణులలో ఏది అభిసరించదు

(1) $\sum_{n=1}^{\infty} \frac{2n+3}{3n-4}$ (2) $\sum_{n=1}^{\infty} \sin\left(\frac{1}{n^2}\right)$

(3) $\sum_{n=1}^{\infty} \frac{1}{n^2+3}$ (4) $\sum_{n=1}^{\infty} \left(\sqrt{n^4+1}-\sqrt{n^4-1}\right)$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 126 Question Id : 5626804973 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The series $\frac{1}{2\sqrt{1}}+\frac{x^2}{3\sqrt{2}}+\frac{x^4}{4\sqrt{3}}+\frac{x^6}{5\sqrt{4}}+\ldots..$ is

$\frac{1}{2\sqrt{1}}+\frac{x^2}{3\sqrt{2}}+\frac{x^4}{4\sqrt{3}}+\frac{x^6}{5\sqrt{4}}+\ldots..$ అనే శ్రేణి

(1) Convergent for $x^2 > 1$

$x^2 > 1$ కు అభిసరిస్తుంది

(2) Divergent for $x^2 \leq 1$

$x^2 \leq 1$ కు అపసరిస్తుంది

(3) Convergent for $x^2 \leq 1$

$x^2 \leq 1$ కు అభిసరిస్తుంది

(4) Convergent for $x = 2$

$x = 2$ కు అభిసరిస్తుంది

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 127 Question Id : 5626804974 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Which of the following series converges conditionally

ఈ క్రింది ఇవ్వబడిన శ్రేణులలో నియతాభిసరణం చెందునది

(1) $\sum_{n=1}^{\infty}\frac{(-1)^{n-1}}{n^3+2}$

(2) $\sum_{n=1}^{\infty}\frac{(-1)^{n-1}}{2n-1}$

(3) $\sum_{n=1}^{\infty}\frac{(-1)^{n-1}}{n^2+4}$

(4) $\sum_{n=1}^{\infty}\frac{(-1)^{n-1}}{n^2\sqrt{n}}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 128 Question Id : 5626804975 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The 'C' value of Rolle's mean value theorem for the function $f(x) = x^2 - 8x + 15$ on [3, 5]

[3, 5] అంతరంలో $f(x) = x^2 - 8x + 15$ అనే ప్రమేయానికి, రోలె మధ్యమ మూల్య సిద్ధాంతపు 'C' విలువ

(1) 1 (2) 5 (3) 3 (4) 4

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 129 Question Id : 5626804976 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The 'C' value of Cauchy's mean value theorem for the functions $f(x) = x^2$, $g(x) = x^3$ on [1, 2] is

[1, 2] అనే అంతరం పై $f(x) = x^2$, $g(x) = x^3$ అనే ప్రమేయాల కు కోషీ మధ్యమ మూల్య సిద్ధాంతపు 'C' విలువ

(1) $\frac{3}{14}$ (2) $\frac{14}{9}$ (3) $\frac{3}{7}$ (4) $\frac{7}{3}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 130 Question Id : 5626804977 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Let a, b, > 0. Then $\lim_{x\to 0}\left(\frac{a^x + b^x}{2}\right)^{\frac{1}{x}} =$

a, b, > 0 అనుకొనుము అపుడు $\lim_{x\to 0}\left(\frac{a^x + b^x}{2}\right)^{\frac{1}{x}} =$

(1) $\sqrt{ab}$ (2) $\sqrt{a}$ (3) $\sqrt{b}$ (4) $\sqrt{a+b}$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 131 Question Id : 5626804978 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\lim_{n\to\infty}\left(\frac{n+1}{n^2+1^2}+\frac{n+2}{n^2+2^2}+\ldots\ldots+\frac{1}{n}\right)=$$

(1) $\frac{1}{2}\log 2+\frac{\pi}{2}$ (2) $\frac{1}{2}\log 2+\frac{\pi}{6}$ (3) $\frac{1}{2}\log 2+\frac{\pi}{4}$ (4) $\log 2-\frac{\pi}{4}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 132 Question Id : 5626804979 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

Coefficient of $(x-\frac{\pi}{2})^2$ in the Taylor series expansion of sinx around $x=\frac{\pi}{2}$

$x=\frac{\pi}{2}$ వద్ద sinx యొక్క టేలర్ శ్రేణి విస్తరణలో $(x-\frac{\pi}{2})^2$ యొక్క గుణకము

(1) -1 (2) $-\frac{1}{2}$ (3) $-\frac{1}{3}$ (4) -3

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 133 Question Id : 5626804980 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\int_1^3 x[x]\,dx =$$

(1) $\frac{15}{2}$ (2) $\frac{13}{2}$ (3) $\frac{11}{2}$ (4) $\frac{17}{2}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 134 Question Id : 5626804981 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If f(x) = |x|+|x-1|, for all x ∈ R then f is

ప్రతి x ∈ R కు f(x) = |x|+|x-1| అయినపుడు f

(1) derivable at x = 0 and x = 1

x = 0 మరియు x = 1 ల వద్ద అవకలనీయమవుతుంది

(2) discontinuous at x =0

x =0 వద్ద విచ్ఛిన్న మవుతుంది

(3) continuous at x = 0 and x = 1

x = 0 మరియు x = 1ల వద్ద అవిచ్ఛిన్నమవుతుంది

(4) discontinuous at x = 1

x = 1 వద్ద విచ్ఛిన్నమవుతుంది

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 135 Question Id : 5626804982 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\lim_{x\to 0}\left(\frac{e^{\frac{1}{x}}-e^{-\frac{1}{x}}}{e^{\frac{1}{x}}+e^{-\frac{1}{x}}}\right)=$$

(1)1 (2) -1 (3) 0 (4) does not exists
వ్యవస్థితం కాదు

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 136 Question Id : 5626804983 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $\vec{r}=xi+yj+zk, r=|\vec{r}|$ then $\nabla \log r=$

$\vec{r}=xi+yj+zk, r=|\vec{r}|$ అయినపుడు $\nabla \log r=$

(1) $\frac{\vec{r}}{r}$ (2) $\frac{\vec{r}}{r^2}$ (3) $-\frac{\vec{r}}{r^2}$ (4) $-\frac{\vec{r}}{r}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 137 Question Id : 5626804984 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The unit normal vector to the surface $x^2 - y^2 + z = 2$ at P(1, -1, 2) is

$x^2 - y^2 + z = 2$ అనే ఉపరితలానికి P(1, -1, 2) is వద్ద యూనిట్ అభిలంబ సదిశ

(1) $\frac{-2i+2j+k}{3}$ (2) $\frac{2i-2j+k}{3}$ (3) $\frac{2i+2j+k}{3}$ (4) $\frac{i+j+k}{\sqrt{3}}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 138 Question Id : 5626804985 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The directional derivative of $\phi(x, y, z) = xyz$ at P(1, 2, 3) in the direction of i + k is

i + k దిశలో $\phi(x, y, z) = xyz$ కు P(1, 2, 3) వద్ద దైశిక వ్యుత్పన్నం

(1) $3\sqrt{2}$ (2) $\sqrt{2}$ (3) $2\sqrt{2}$ (4) $4\sqrt{2}$

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 139 Question Id : 5626804986 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

The equation of the tangent plane to the surface $\phi(x, y, z) = yz - zx + xy + 5 = 0$ at the point A(1, -1, 2) is

$\phi(x, y, z) = yz - zx + xy + 5 = 0$ అనే తలానికి A(1, -1, 2) వద్ద స్పర్శ తలం సమీకరణం

(1) $3x - 3y + 2z - 10 = 0$ (2) $x + 3y + 2z + 10 = 0$

(3) $3x + y + z - 10 = 0$ (4) $x - 3y + z + 10 = 0$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 140 Question Id : 5626804987 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $\vec{F} = (y^2 + z^2 - x^2)i + (z^2 + x^2 - y^2)j + (x^2 + y^2 - z^2)k$ then curl $\vec{F}$ at P(1, 2, 3) is

$\vec{F} = (y^2 + z^2 - x^2)i + (z^2 + x^2 - y^2)j + (x^2 + y^2 - z^2)k$ అయిన P(1, 2, 3) వద్ద curl $\vec{F}$ =

(1) 2i + 4j + 2k (2) 3i + 2j + k (3) - 2i + 4j - 2k (4) i + 2j + 3k

Options :

1. ✖ 1

2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 141 Question Id : 5626804988 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $\vec{r} = xi + yj + zk$ and $\vec{a} = a_1 i + a_2 j + a_3 k$ is a constant vector then curl $(\vec{r} \times \vec{a})$

$\vec{r} = xi + yj + zk$ మరియు $\vec{a} = a_1 i + a_2 j + a_3 k$ ఒక స్థిర సదిశ అయితే curl $(\vec{r} \times \vec{a})$

(1) $2\vec{a}$ (2) $-2\vec{a}$ (3) $\vec{a}$ (4) $-\vec{a}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 142 Question Id : 5626804989 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If the vector $\vec{V} = (3x + 2y)i + (2y - z)j + (x + az)k$ is solenoidal then the value of a =

సదిశ $\vec{V} = (3x + 2y)i + (2y - z)j + (x + az)k$ నిరపసరణ (సోలినాయిడల్) అయితే a =

(1) – 2 (2) – 3 (3) – 4 (4) – 5

Options :

1. ✖ 1
2. ✖ 2
3. ✖ 3
4. ✔ 4

Question Number : 143 Question Id : 5626804990 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $F = 3xy\,i - y^2 j$ and C is the curve $y = 2x^2$ in the xy – plane from O(0, 0) to A(1, 2) then $\int_C F.\,dr =$

$F = 3xy\,i - y^2 j$ మరియు xy తలంలో $y = 2x^2$ ను వక్రం C గా O(0, 0) నుండి A(1, 2) వరకు తీసికొన్నపుడు $\int_C F.\,dr =$

(1) $-\frac{7}{6}$ (2) $-\frac{6}{7}$ (3) $\frac{7}{6}$ (4) $\frac{6}{7}$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 144 Question Id : 5626804991 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If S is a closed surface of the sphere $x^2 + y^2 + z^2 = 9$ then $\int_S \bar{r}.\,\hat{n}\,ds =$

$x^2 + y^2 + z^2 = 9$ అనే గోళం చే ఆవరించబడిన తలం S అయితే $\int_S \bar{r}.\,\hat{n}\,ds =$

(1) 54π (2) 108π (3) $216\,\pi$ (4) $27\,\pi$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 145 Question Id : 5626804992 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\int_0^1\int_0^1\int_0^1 e^{x+y+z}\,dx\;\;dy\;\;dz$$

(1) $(e-1)^2$ (2) $(e-1)^3$ (3) $e(e-1)$ (4) $e-1$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 146 Question Id : 5626804993 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\int_{y=0}^{1}\int_{x=y^2}^{1}\int_{z=0}^{1-x} x \; dz \; dx \; dy$$

(1) $\frac{6}{35}$ (2) $\frac{7}{36}$ (3) $\frac{4}{35}$ (4) $\frac{8}{37}$

Options :

1. ✖ 1
2. ✖ 2
3. ✔ 3
4. ✖ 4

Question Number : 147 Question Id : 5626804994 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If D is the circle $x^2 + y^2 = 1$ then $\iint_D x^2 y^2 \, dx \, dy =$

$x^2 + y^2 = 1$ వృత్తాన్ని D సూచిస్తే $\iint_D x^2 y^2 \, dx \, dy =$

(1) $\frac{\pi}{12}$ (2) $\frac{\pi}{24}$ (3) $\frac{\pi}{8}$ (4) $\frac{\pi}{16}$

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 148 Question Id : 5626804995 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\int_{x=1}^{3}\int_{y=1}^{2} x^2 y \; dy \; dx =$$

(1) 12 (2) 13 (3) 14 (4) 15

Options :

1. ✖ 1
2. ✔ 2
3. ✖ 3
4. ✖ 4

Question Number : 149 Question Id : 5626804996 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

$$\int_{0}^{1}\int_{0}^{1-x}\int_{0}^{1-x-y} xyz \; dz \; dy \; dx$$

(1) $\frac{1}{720}$ (2) $\frac{1}{360}$ (3) $\frac{1}{180}$ (4) $\frac{1}{90}$

Options :

1. ✔ 1
2. ✖ 2
3. ✖ 3
4. ✖ 4

Question Number : 150 Question Id : 5626804997 Question Type : MCQ Option Shuffling : No Display Question Number : Yes Single Line Question Option : No Option Orientation : Vertical

If $x = r\cos\theta, y = r\sin\theta$ then

$$\begin{vmatrix} \frac{\partial x}{\partial r} & \frac{\partial x}{\partial \theta} \\ \frac{\partial y}{\partial r} & \frac{\partial y}{\partial \theta} \end{vmatrix} =$$

$x = r\cos\theta, y = r\sin\theta$ అయితే

$$\begin{vmatrix} \frac{\partial x}{\partial r} & \frac{\partial x}{\partial \theta} \\ \frac{\partial y}{\partial r} & \frac{\partial y}{\partial \theta} \end{vmatrix} =$$

(1) θ (2) $r\cos\theta$ (3) r (4) $r\sin\theta$

Options :

1. ✖ 1

2. ✖ 2
3. ✔ 3
4. ✖ 4